

Amendments to the Claims

This listing of claims, if entered, will replace all prior versions and listings of claims in the present application.

1. (Currently Amended) A computer-implemented method for managing inventory, the method comprising:

synchronizing inventory balance information between a source computerized inventory

management system and a target computerized inventory management system, wherein

the source computerized inventory management system and the target computerized

inventory management system are among a plurality of computerized inventory management systems,

the synchronizing is bi-directional, wherein

the synchronizing is performed by an integration server, and

the synchronizing comprises

extracting inventory balance information in a source format, wherein

the source format is a format used by the source computerized inventory management system, and

the inventory balance information in the source format is associated with the source computerized inventory management system,

converting the inventory balance information in the source format into source inventory balance information in an intermediate format,

receiving target inventory balance information, wherein

the target inventory balance information indicates an existing inventory balance information,

the existing inventory balance information is associated with the target computerized inventory management system, and

the target inventory balance information is associated with the target computerized inventory management system,

converting the target inventory balance information into target inventory balance information in the intermediate format,

generating an inventory balance delta, wherein

the inventory balance delta is calculated as a difference between a source inventory balance and a target inventory balance,
the source inventory balance information in the intermediate format comprises the source inventory balance,
the target inventory balance information in the intermediate format comprises the target inventory balance, and
the generating is performed by the integration server, **and**
converting the inventory balance delta into inventory balance information in a target format, wherein
the target format is a format used by the target computerized inventory management system,
the inventory balance information in the target format comprises the inventory balance delta, and
the inventory balance information in the target format is associated with the target computerized inventory management system, **and**
creating a transaction, wherein
the transaction is configured to update the existing inventory balance information, and
the transaction is based on the inventory balance delta.

2. (Previously Presented) The computer-implemented method of Claim 1, wherein the receiving the target inventory balance information is performed in response to querying the target computerized inventory management system by the integration server.

3. (Previously Presented) The computer-implemented method of Claim 1, further comprising:

extracting inventory balance information in a second source format that is associated with a second source computerized inventory management system that is distinct from the first source computerized inventory management system, wherein
the second source computerized inventory management system is one of the plurality of computerized inventory management systems;
converting the inventory balance information in the second source format into inventory balance information that is in the intermediate format;

converting the inventory balance information in the intermediate format into inventory balance information in the target format; and
using the inventory balance information in the target format to update an existing inventory balance record in the target computerized inventory management system.

4. (Currently Amended) The computer-implemented method of Claim 1, further comprising:

updating the existing inventory balance information using the transaction-inventory balance information in the target format, wherein
the existing inventory balance information is in the target format[[,]]
~~the existing inventory balance information is associated with the target computerized inventory management system, and~~
~~the updating is based, at least in part, on the inventory balance delta.~~

5. (Previously Presented) The computer-implemented method of Claim 1, wherein the intermediate format comprises a hierarchy of data elements comprising a plurality of inventory balance elements comprising:

a list of inventory balances element;
an inventory balance related inventory location element;
a list of related inventory balances for defining a plurality of related inventory balances;
and
a custom data element for defining customized attributes for the inventory.

6. (Previously Presented) The computer-implemented method of Claim 5, wherein each of the plurality of inventory balance elements comprises a related inventory location element for defining related inventory location identifier.

7. (Previously Presented) The computer-implemented method of Claim 5, wherein each of the plurality of inventory balance elements comprises a list of inventory balance data element for defining a plurality of inventory balance data elements.

8. (Previously Presented) The computer-implemented method of Claim 5, wherein each of the plurality of inventory balance elements comprises an inventory balance custom data.

9. (Previously Presented) The computer-implemented method of Claim 7, wherein each of the plurality of inventory balance data elements comprises a related product element for defining a product identifier.

10. (Previously Presented) The computer-implemented method of Claim 7, wherein each of the plurality of inventory balance data element comprises a list of balance data element for defining a plurality of balance data elements.

11. (Previously Presented) The computer-implemented method of Claim 10, wherein each of the plurality of balance data elements comprises:

- a bucket code element;
- a quantity of product element;
- a product unit of measure code element; and
- a balance data custom data element.

12. (**Currently Amended**) A computer-readable storage medium carrying one or more sequences of instructions for managing inventory, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform:

synchronizing inventory balance information between a source computerized inventory

management system and a target computerized inventory management system, wherein the source computerized inventory management system and the target computerized inventory management system are among a plurality of computerized inventory management systems,

the synchronizing is bi-directional, wherein

the synchronizing is performed by an integration server, and

the synchronizing comprises

extracting inventory balance information in a source format, wherein

the source format is a format used by the source computerized inventory management system, and

the inventory balance information in the source format is associated with the source computerized inventory management system,

converting the inventory balance information in the source format into source inventory balance information in an intermediate format,

receiving **target** inventory balance information, wherein
the target inventory balance information indicates an existing
inventory balance information,
the existing inventory balance information is associated with the
target computerized inventory management system, and
the target inventory balance information is associated with the target
computerized inventory management system,
converting the target inventory balance information into target inventory balance
information in the intermediate format,
generating an inventory balance delta, wherein
the inventory balance delta is calculated as a difference between a source
inventory balance and a target inventory balance,
the source inventory balance information in the intermediate format
comprises the source inventory balance,
the target inventory balance information in the intermediate format
comprises the target inventory balance, and
the generating is performed by the integration server, **and**
converting the inventory balance delta into inventory balance information in a
target format, wherein
the target format is a format used by the target computerized inventory
management system,
the inventory balance information in the target format comprises the
inventory balance delta, and
the inventory balance information in the target format is associated with
the target computerized inventory management system, **and**
creating a transaction, wherein
the transaction is configured to update the existing inventory balance
information, and
the transaction is based on the inventory balance delta.

13. (Previously Presented) The computer-readable storage medium of Claim 12, wherein the receiving inventory balance information is performed in response to querying the target computerized inventory management system by the integration server.

14. (Previously Presented) The computer-readable storage medium of Claim 12, further comprising:

extracting inventory balance information in a second source format that is associated with a second source computerized inventory management system that is distinct from the first source computerized inventory management system, wherein the second source computerized inventory management system is one of the plurality of computerized inventory management systems;

converting the inventory balance information in the second source format into inventory balance information that is in the intermediate format;

converting the inventory balance information in the intermediate format into inventory balance information in the target format; and

using the inventory balance information in the target format to update an existing inventory balance record in the target computerized inventory management system.

15. (Currently Amended) The computer-readable storage medium of Claim 12, further comprising:

updating the existing inventory balance information using the transaction-inventory balance information in the target format, wherein the existing inventory balance information is in the target format[[,]]
~~the existing inventory balance information is associated with the target computerized inventory management system, and the updating is based, at least in part, on the inventory balance delta.~~

16. (Previously Presented) The computer-readable storage medium of Claim 12, wherein the intermediate format comprises a hierarchy of data elements comprising a plurality of inventory balance elements comprising:

a list of inventory balances element;

an inventory balance related inventory location element;

a list of related inventory balances for defining a plurality of related inventory balances;

and

a custom data element for defining customized attributes for the inventory.

17. (Previously Presented) The computer-readable storage medium of Claim 16, wherein each of the plurality of inventory balance elements comprises a related inventory location element for defining related inventory location identifier.
18. (Previously Presented) The computer-readable storage medium of Claim 16, wherein each of the plurality of inventory balance elements comprises a list of inventory balance data element for defining a plurality of inventory balance data elements.
19. (Previously Presented) The computer-readable storage medium of Claim 16, wherein each of the plurality of inventory balance elements comprises an inventory balance custom data.
20. (Previously Presented) The computer-readable storage medium of Claim 18, wherein each of the plurality of inventory balance data elements comprises a related product element for defining a product identifier.
21. (Previously Presented) The computer-readable storage medium of Claim 18, wherein each of the plurality of inventory balance data elements comprises a list of balance data element for defining a plurality of balance data.
22. (Previously Presented) The computer-readable storage medium of Claim 21, wherein each of the plurality of balance data elements comprises:
- a bucket code element;
 - a quantity of product element;
 - a product unit of measure code element; and
 - a balance data custom data element.
- 23-33. (Canceled)
34. (Previously Presented) The computer-implemented method of Claim 1, further comprising:
- receiving second target inventory balance information, wherein
 - the second inventory balance information is associated with a second source computerized inventory management system,
 - converting the second inventory balance information into second source inventory balance information in the intermediate format, and

the generating the inventory balance delta further comprises calculating a second difference between a second source inventory balance and the difference between the source inventory balance and the target inventory balance, wherein
the second source inventory balance information in the intermediate format comprises the second source inventory balance.

35. (Previously Presented) The computer-implemented method of Claim 1, wherein the source inventory balance information comprises the source inventory balance for a plurality of products;
the target inventory balance information comprises the target inventory balance for the plurality of products; and
the inventory balance delta comprises a plurality of differences between the source inventory balance and the target inventory balance, wherein
each of the plurality of differences indicates a difference between the source inventory balance for one of the plurality of products and a corresponding target inventory balance for the one of the plurality of products.

36. (Previously Presented) The computer-implemented method of Claim 35, wherein the converting the inventory balance delta into inventory balance information in the target format comprises:
converting the inventory balance delta into a plurality of inventory balance information in the target format, wherein
each of the plurality of inventory balance information in the target format is associated with a different one of the plurality of products.

37. (Previously Presented) The computer-implemented method of Claim 1, wherein the source inventory balance information further comprises a respective source inventory balance at each location of a plurality of locations.